The opinion in support of the decision being entered today was not written for publication and is not binding precedent of the Board.

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE BOARD OF PATENT APPEALS
AND INTERFERENCES

Ex parte ANN M. SUTHERLAND and
DAVID F. SUTHERLAND

Appeal No. 2006-1077
Application No. 10/034,907

ON BRIEF

Before WARREN, KRATZ and GAUDETTE, Administrative Patent Judges.

GAUDETTE, Administrative Patent Judge.

DECISION ON APPEAL

This is an appeal under 35 U.S.C. § 134 from the Final Rejection mailed October 20, 2004. Claims 11-16, 18 and 19 are pending and have been finally rejected.

Claims 11-16, 18 and 19 are reproduced below:

> 11. A light transmitting window covering panel formed of a fabric comprising staple fiber acrylic yarn woven in groups of warp threads and groups of weft threads, the fiber content of said yarn being about 100 percent pigmented acrylonitrile polymer, and the weave density being such as to provide openings between said groups of warp threads and said groups of weft threads of about 0.03 inches to 0.25 inches to provide human visual perception through said panel and blocking the transmission of ultraviolet light through said panel in A category wavelength in a range of about 69 percent to 76 percent and in B category wavelength in a range of about 74 percent to 78 percent.

12. The window covering set forth in Claim 11 wherein:
each group of warp threads comprises three threads disposed adjacent one another between said openings, respectively.

13. The window covering set forth in Claim 11 wherein:
each group of weft threads comprises three threads disposed adjacent one another between said openings, respectively.

14. The window covering set forth in Claim 11 wherein:
the yarn weight is not less than a yarn number of about 24.

15. The window covering set forth in Claim 14 wherein:
the yarn is 2 ply.

16. A light transmitting window covering panel comprising an ultraviolet radiation resistant fabric formed of acrylic yarn woven in groups of warp threads and groups of weft threads, the fiber content of said yarn being about 100 percent pigmented acrylonitrile polymer, the yarn weight being not less than a yarn number of about 24 and the weave density of said fabric is such as to provide openings between groups of adjacent warp threads and groups adjacent weft threads in a range of about 0.03 to .25 inches square to provide human visual perception through said panel and blocking the transmission of ultraviolet light through said panel in A category wavelength of at least about 69 percent and in B category wavelength of at least about 74 percent.

18. The window covering set forth in Claim 16 wherein:
each group of warp threads comprises three threads disposed adjacent one another between said openings, respectively.

19. The window covering set forth in Claim 16 wherein:
each group of weft threads comprises three threads disposed adjacent one another between said openings, respectively.

References Relied on by the Examiner

The examiner relies upon the following references as evidence of unpatentability:

Goldman	2,039,987	May 5, 1936
Lynch et al. (Lynch)	3,417,794	Dec. 24, 1968
Goodfellow	4,751,117	June 14, 1988
Hughes	5,503,917	Apr. 2, 1996
Edwards et al. (Edwards)	6,037,280	Mar. 14, 2000
Wade	6,268,450	July 31, 2001

Grounds of Rejection

1. Claims 14, 16, 18 and 19 are rejected under 35 U.S.C. § 112, second paragraph.

2. Claim 11 is rejected under 35 U.S.C. § 103(a) as unpatentable over Edwards in view of Wade and further in view of Hughes

3. Claims 12 and 13 are rejected under 35 U.S.C. § 103(a) as unpatentable over Edwards in view of Wade and Hughes as applied to claim 11 and further in view of Lynch.

4. Claims 14 and 16 are rejected under 35 U.S.C. § 103(a) as unpatentable over Edwards in view of Wade and Hughes as applied to claim 11 and further in view of Goldman.

5. Claim 15 is rejected under 35 U.S.C. § 103(a) as unpatentable over Edwards in view of Wade, Hughes and Goldman and further in view of Goodfellow.

6. Claims 18 and 19 are rejected under 35 U.S.C. § 103(a) as unpatentable over Edwards in view of Wade, Hughes and Goldman and further in view of Lynch.

We reverse as to all five grounds of rejection.

Background

The invention relates to a light transmitting window covering panel formed of a fabric which is capable of both providing human visual perception therethrough and blocking the transmission of ultraviolet light.

Discussion

Section 112 Rejection

Claims 14, 16, 18 and 19 are rejected under 35 U.S.C. § 112, second paragraph, as indefinite. The examiner maintains that the recitation of a yarn weight that is "not less than a yarn number of about 24" is indefinite because "yarn number" is a relative measure of the fineness of the yarns. Final Rejection, p. 3. Appellants note that the Complete Textile Glossary, relied on by the examiner, defines "yarn number" for manufactured filament yarns as the "direct yarn number" (equal to linear density) which is mass per unit length of yarn. Appeal Brief, p. 5. Appellants assert that the meaning of the yarn number would be clear to one of ordinary skill in the art. Id. The examiner maintains that while "yarn number" is a defined term of art, the specification must provide the units of mass and length in order for the number to have meaning.

The relevant inquiry under § 112, second paragraph, is whether the claims delineate to a skilled artisan the bounds of the invention. See In re Venezia, 530 F.2d 956, 958, 189 USPQ 149, 151 (CCPA 1976).). In interpreting claim terms, we rely on the written description for guidance in ascertaining the scope and meaning of the claims. See Phillips v. AWH Corp., 415 F.3d 1303, 1317, 75 USPQ2d 1321, 1329 (Fed. Cir. 2005) (en banc). In re Morris, 127 F.3d 1048, 1054, 44 USPQ2d 1023, 1027 (Fed. Cir. 1997). See Renishaw PLC v. Marposs Societa' per Azioni, 158 F.3d 1243, 1250, 48 USPQ2d 1117, 1122 (Fed. Cir. 1998). ("[W]here there are several common meanings for a claim term, the patent disclosure serves to point away from the improper meanings and toward the proper meaning.").

Although the units of mass and length are not specified for the yarn number, the fabric is described in the specification using the English system of measurement. Accordingly, we are confident that one of ordinary skill in the art would be familiar with the units involved in arriving at a yarn number of 24 for an acrylonitrile fiber.

The rejection is reversed.

Prior Art Rejections

Claim 11 is rejected under 35 U.S.C. § 103(a) as unpatentable over Edwards in view of Wade and further in view of Hughes. The remaining claims are rejected as unpatentable in view of the same combination of references and further in view of various secondary references. For the reasons discussed below, we find that the examiner has failed to establish a prima facie case of obviousness with respect to claim 11. We further find that the additional references relied upon in the rejections of the remaining claims fail to cure the deficiences in the combined teachings of Edwards, Wade and Hughes. Therefore, the examiner has also failed to show that claims 12-19 are unpatentable over the cited prior art.

The examiner relies on Edwards for a disclosure of a porous woven fabric with increased ultraviolet blocking. The examiner notes that Edwards uses standard acrylic fibers, but does not specifically mention acrylonitrile fibers in the woven material. The examiner relies on Wade for a teaching of fibers comprising up to 98% acrylonitrile. The examiner maintains that it would have been obvious to one of ordinary skill in the art to have used Wade's acrylonitrile fibers in the textile taught by Edwards in order to provide a woven material with improved UV stability as taught by Wade. The examiner relies on

Hughes for a teaching that the ratio of apertures to thread is a result effective variable that increases breathability and decreases UV protection with increasing aperture size.

Appellants dispute the examiner's finding that Edwards teaches a fabric with both openings and light blocking capability, arguing:

> [a]lthough Edwards et al. suggests that the fabric is porous, Edwards et al. fills the pores or spaces of the fabric with UV blocking particles and thus the fabric of Edwards et al. loses the advantages of light transmissivity, visual perception therethrough and breatheability provided by Appellants' claimed articles.

Appeal Brief, p. 8. Appellants concede that Wade discloses an acrylic fiber polymer precursor for use in outdoor fabric applications. Appeal Brief, p. 7. However, appellants urge that Wade fails to disclose or suggest fabrics having both light transmissivity and UV light blocking characteristics as required by claim 11. Appeal Brief, p. 7. Appellants argue that Hughes

> fails to suggest the claimed range of opening sizes in the fabric, the arrangement of groups of threads between openings or the ability to provide human visual perception through a window covering panel while blocking Category A and Category B UV radiation within the ranges or limits required by Claim 11.

Appeal Brief, p. 7. Thus, appellants maintain that even if Edwards were combined with the secondary references, the present invention would not result.

The examiner bears the initial burden of establishing a prima facie case of obviousness. In re Kumar, 418 F.3d 1361, 1366, 76 USPQ2d 1048, 1050 (Fed. Cir. 2005). To support a rejection on obviousness grounds, the examiner must provide a detailed analysis of the prior art and reasons why one of ordinary skill in the art would have possessed the knowledge and motivation to make the claimed invention. See In re Kahn, 441 F.3d 977, 988, 78 USPQ2d 1329, 1336 (Fed. Cir. 2006). In this case, the

examiner has failed to establish a prima facie showing of obviousness because the examiner's analysis is based on an incorrect interpretation of the claim language. See Panduit v. Dennison Mfg. Co., 774 F.2d 1082, 1093, 227 USPQ 337, 344 (Fed. Cir. 1985) (patentability begins with the legal question "what is the invention claimed?").

During prosecution, claim terms are given their broadest reasonable construction consistent with the specification. See In re American Academy Of Science Tech Center, 367 F.3d 1359, 1369, 70 USPQ2d 1827, 1834 (Fed. Cir. 2004). Claim language should be read in light of the specification as it would be understood by one of ordinary skill in the art, id., keeping in mind that broad claim terms should not be limited solely on the basis of specification passages, In re Bigio, 381 F.3d 1320, 1324, 72 USPQ2d 1209, 1211 (Fed. Cir. 2004).

The claims recite a window covering panel formed of a fabric comprising acrylic yarn,

> the fiber content of said yarn being about 100 percent pigmented acrylonitrile polymer... the weave density being such as to provide openings... to provide human visual perception through said panel and blocking the transmission of ultraviolet light through said panel.

Claim 11; see claim 16. The examiner apparently interprets the claim language as broadly encompassing "a porous woven fabric that has increased ultraviolet blocking." Examiner's Answer, p. 4 (describing Edwards). In our view, the language of the claims, when read in light of the specification, supports appellants' contention that the claimed invention is drawn to a fabric wherein the ultraviolet blocking is provided by the fiber content and weave density.

In responding to appellants' arguments, the examiner points out that the claims do not preclude either UV blocking particles or binding agent. The claims do, however, require that the fabric itself, i.e. sans particles, be capable of blocking UV light. See Specification, p. 6 ("A fabric having the specifications set forth hereinabove has been indicated to be capable of blocking ultraviolet (UV) light.") In contrast, Edwards is directed to a fabric wherein ultraviolet blocking is provided by particles, attached by means of a binding agent, within interstitial spaces in the fabric, on a surface of the fabric, or incorporated into the body of the fabric. Edwards, col. 2, ll. 52-60. In the Background section of the patent, Edwards acknowledges that tightly woven fabrics will reduce the transmission of UV radiation. Col. 1, ll. 56-57. However, Edwards specifically states that:

> The UV blocking property of the fabric of the present invention arises from the deflection, reflection, absorption and/or scattering of ultraviolet rays having wave-lengths between 280 and 400 nm by the UV blocking particles incorporated into the fabric.

Col. 3, 11. 28-32.

Because the examiner has failed to cite any references, either alone or in combination, which teach a fabric having the limitations recited in each of claims 11-19, we reverse each of the prior art rejections.

It is important that the Board of Patent Appeals and Interferences be informed promptly of any action affecting the status of the appeal (i.e., abandonment, issue, reopening prosecution).

REVERSED

CHARLES F. WARREN)
Administrative Patent Judge)
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PETER F. KRATZ) BOARD OF PATENT
Administrative Patent Judge) APPEALS
) AND
) INTERFERENCES
)
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